

Notice of Allowability

Application No.

10/803,118

Examiner

Michael Kornakov

Applicant(s)

BOYD ET AL.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/16/2004.
2. ☒ The allowed claim(s) is/are 1-14.
3. ☒ The drawings filed on 16 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. M. Gencarella, esq., on 08/05/2004.

The application has been amended as follows:

In the specification on page 1, line 9, after the words "filed on June 28, 2002," insert ---now U.S. 6,729,339---

In the specification on page 10, line 24 replace the reference number "154" after the words "Sonic transducer" by the number ---152---.

In the specification on page 11, line 1 replace the reference number "152" after the words "coupled to resonator" by the number ---154---.

In the specification on page 11, line 1 replace the reference number "152" after the word "Resonator" by the number ---154---.

These amendments are made in order to update the continuity of the instant application and to correct the minor typographical errors.

In claim 2 delete the clause "the method operation of" after the word "wherein"

In claim 4 delete the clause "the method operation of" after the word "wherein"

In claim 7 after the word "comprising" insert ---providing a sonic cleaner---

In claim 7 after the words "an inner jacket and an outer jacket" insert ---of the sonic cleaner---

In claim 7 after the words "a cleaning agent within the outer jacket" insert ---of the sonic cleaner---

These amendments are made in order to clarify the processing steps of the instant invention.

Allowable claims

2. Claims 1-14 are allowable over the prior art of record.

Reasons for Allowance

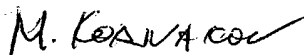
3. The following is an examiner's statement of reasons for allowance: the instant claims recite a method of sonic cleaning a semiconductor substrate, including the step of transmitting sonic energy to the substrate through the interface at the orifice, wherein the interface is formed between the cooling and the cleaning agents at an orifice located between the inner (cooling) and outer (cleaning) jackets of the sonic cleaner and wherein balancing the pressures of the cooling fluid and the cleaning agent is performed in order to minimize dilution of the cleaning agent by the cooling fluid. These essential steps of the instant invention are not anticipated or suggested fairly by the prior art references. No other prior art that anticipates or suggests fairly the instant claims has been located as of the date of this office action. Therefore, claims 1-14 are allowed over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (571) 272-1303. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Kornakov
Primary Examiner
Art Unit 1746

08/06/2004